



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Shinji Maekawa
Serial No. : 09/724,403
Filed : November 27, 2000
Title : METHOD OF MANUFACTURING A SEMICONDUCTOR DEVICE WITH
TENSILE STRESS (AS AMENDED)

Art Unit : 2813
Examiner : Yennhu B. Huynh

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
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REPLY TO ACTION OF DECEMBER 14, 2004

Claims 1-4, 7-9, 20, and 60-71 are under consideration in this application, with claims 1, 7-9, and 61 being independent. Claims 5, 6, 10-19, and 21-59 have been withdrawn from consideration.

Independent claims 1 and 7, and dependent claims 2, 62, and 67-71, have been rejected as being anticipated by Yamazaki '044 (U.S. Patent No. 6,693,044B1).

Claim 1 recites a method of manufacturing a semiconductor device including the steps of forming a semiconductor film over a substrate and "forming a material having a tensile stress of 8×10^9 dynes/cm² or more in contact with the semiconductor film, whereby *an impurity element in the semiconductor film is gettered into the material*" (emphasis added). Applicants request reconsideration and withdrawal of the rejection of claim 1 because Yamazaki '044 does not describe or suggest forming the recited material that receives, through a gettering process, an impurity element from a semiconductor film in contact with the material.

Yamazaki '044 describes a semiconductor device fabrication method in which a nickel containing layer 205, which the Examiner equates to the recited material, is formed on a first amorphous silicon film 201, which the Examiner equates to the recited semiconductor film, to promote crystallization of the amorphous silicon film 201. Yamazaki '044, however, does not describe or suggest that an impurity element in the amorphous silicon film 201 is gettered into the nickel containing layer 205. Rather, Yamazaki '044 only describes nickel being gettered from an island region 406 of a resulting crystallized silicon film into a phosphorus doped region 401 of the same crystallized silicon film. See col. 12, lines 5-40, Figs. 4A-E.